Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Currently Amended) A temperature sensor according to ~~claim 1,~~ claim 11, further comprising a guide part, projecting from an edge of the opening in the holder, for guiding leads constituting the lead pair;

wherein the sensor cover covers the guide part.

3. (Currently Amended) A temperature sensor according to ~~claim 2,~~ claim 12, wherein the guide part has a T-shaped form including a part extending in a direction perpendicular to an extending direction of the holder and a part extending parallel to the extending direction of the holder.

4. (Currently Amended) A temperature sensor according to ~~claim 1,~~ claim 11, wherein an edge of the opening of the holder is formed with a substantially annular hook part projecting to ~~the~~ an outside of the holder; and

wherein the hook part engages at least a part of the sensor cover.

5. (Currently Amended) A temperature sensor according to ~~claim 1,~~ claim 11, wherein the sensor cover is formed by hot melt molding.

6. (Canceled)

7. (Previously Presented) A temperature sensor according to claim 9, wherein the holder and filler resin part are constituted by different kinds of resins.

8. (Previously Presented) A temperature sensor according to claim 9, wherein the holder and the filler resin part are constituted by the same kind of resins.

9. (Currently Amended) A temperature sensor according to ~~claim 1,~~ claim 11, wherein the holder is constituted by a resin; and

wherein the temperature detecting device is covered only with a device protecting part constituted by the holder and the filler resin part.

10. (Previously Presented) A temperature sensor according to claim 9, wherein the device protecting part contains a polyphenylene sulfide resin as a constituent material.

11. (Currently Amended) A temperature sensor ~~according to claim 1,~~ comprising:

a bottomed tubular holder having an opening;

a temperature detecting device, contained in a bottom part of the holder, having a lead pair connected thereto so as to be introduced from an opening side;

a filler resin part filling the holder so as to seal the temperature detecting device and extending to the opening; and

a sensor cover comprising a cap part covering the whole opening and a neck part extending from the cap part in a direction generally parallel to the opening of the bottomed tubular holder, wherein

the cap part and the neck part are integrated together, and

~~wherein~~ the neck part is extending from the cap part in a direction substantially perpendicular to ~~the~~ an extending direction of the holder.

12. (Currently Amended) A temperature sensor ~~according to claim 2,~~ comprising:

a bottomed tubular holder having an opening;

a temperature detecting device, contained in a bottom part of the holder, having a lead pair connected thereto so as to be introduced from an opening side;

a filler resin part filling the holder so as to seal the temperature detecting device and extending to the opening;

a sensor cover comprising a cap part covering the whole opening and a neck part extending from the cap part in a direction generally parallel to the opening of the bottomed tubular holder, wherein the cap part and the neck part are integrated together; and

a guide part, projecting from an edge of the opening in the holder, for guiding leads constituting the lead pair;

wherein the sensor cover covers the guide part, and ~~wherein~~ the lead pair extending substantially vertically from the filler resin part is bent at substantially right angles toward the guide part.

13. (New) A temperature sensor according to claim 12, wherein an edge of the opening of the holder is formed with a substantially annular hook part projecting to an outside of the holder; and

wherein the hook part engages at least a part of the sensor cover.

14. (New) A temperature sensor according to claim 12, wherein the sensor cover is formed by hot melt molding.

15. (New) A temperature sensor according to claim 12, wherein the holder is constituted by a resin; and

wherein the temperature detecting device is covered only with a device protecting part constituted by the holder and the filler resin part.

16. (New) A temperature sensor according to claim 15, wherein the holder and filler resin part are constituted by different kinds of resins.

17. (New) A temperature sensor according to claim 15, wherein the holder and the filler resin part are constituted by the same kind of resins.

18. (New) A temperature sensor according to claim 15, wherein the device protecting part contains a polyphenylene sulfide resin as a constituent material.